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Cyrtonota timida, a new species from Colombia (Coleoptera: Chrysomelidae: Cassidinae: Mesomphaliini)

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Abstract. *Cyrtonota timida*, a species new to science, is described from Colombia. It belongs to *C. compulsa* group, distinguished by elytra prevalently red without metallic tints.

Key words: Coleoptera, Chrysomelidae, Cassidinae, Stolaini, *Cyrtonota*, Colombia, new species.

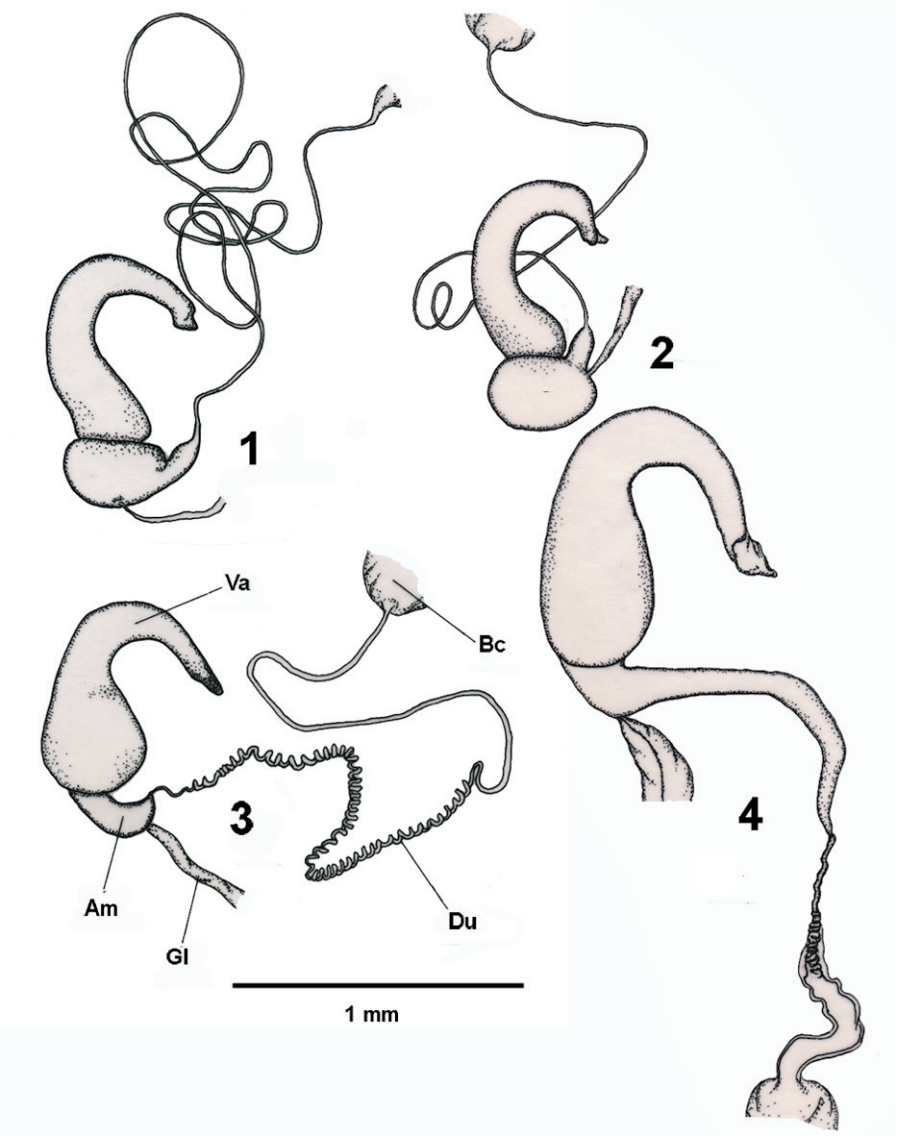
The genus *Cyrtonota* Chevrolat, 1837 comprises at present 60 known species (Borowiec 1999, 2007, Sekerka 2007), mainly distributed in mountain and submountain environments of Neotropical region. Among recently studied material I have found a specimen of a new species collected in Colombia. Its description is given below. The new taxon is the seventeenth *Cyrtonota* species up to now recorded from Colombia.

***Cyrtonota timida* n. sp.**

Diagnosis

The new species belongs to *C. compulsa* group (*sensu* Borowiec 2000), characterized by elytra prevalently red and black without metallic tints, strongly tuberculate and broadly rounded at apex, pronotum without spots of dense vestiture. The group comprises ten species, all of them have been recently keyed by Borowiec (2007) together with all *Cyrtonota* species lacking metallic tints on elytra. Among the species of this group *C. bugaensis* Borowiec et Sassi, 1999 differs from the new species in pronotum less transverse, larger black pattern along elytral margin, puncturation of explanate margin more feeble and sparser, body more circular. *C. banghaasi* (Spaeth, 1902) differs in pronotum with shining surface, elytral punctures smaller, black pattern along

elytral margin missing, body less circular. *C. balyi* (Kirsch, 1883) (= *C. christophori* Borowiec, 1998) differs in larger black pattern along elytra, broader pronotum, anterior elytral angles more protruded anterad. *C. kolbei* (Spaeth, 1907) differs in pronotum less transverse, postscutellar gibbosity differently shaped, elytral ground less shining, finer and more regularly arranged elytral punctures, elytral margin only narrowly black.



1-4. Spermatheca: 1 – *Cyrtonota timida* n. sp., 2 – *Cyrtonota trigonata* (Spaeth, 1901), 3 – *Botanochara angulata* (Germar, 1824), 4 – *Stolas discoides* (Linnaeus, 1758). Am – ampulla, Bc – bursa copulatrix, Du – ductus spermathecae, Gl - ductus of auxiliary gland, Va – vasculum

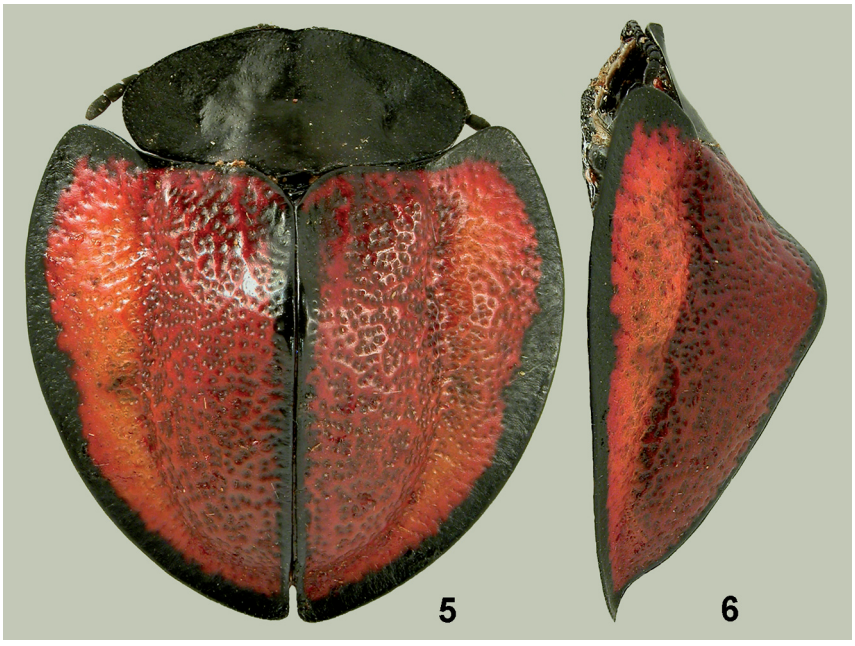
C. montana Borowiec, 2000 differs in pronotum brown with only narrowly black lateral margins, black pattern on elytral disk differently shaped, elytral punctures finer and more uniformly distributed on disk. *C. punctatissima* (Spaeth, 1901) differs in uniformly black body and punctation of dorsal surface more closely and regularly arranged. *C. bondari* (Spaeth, 1928), *C. compulsa* (Spaeth, 1909), *C. gibbera*, Borowiec, 1989 and *C. ruforeticulata* Borowiec, 2007 all differ in elytral sculpture forming a red reticulation or red reticulate spots on elytra.

Description

Length: 14.9 mm; width: 13.4 mm; length of pronotum: 3.8 mm; width of pronotum: 8.7 mm; length/width ratio: 1.11; Body almost circular in outline, elytral apex regularly rounded.

Pronotum black. Scutellum black. Elytra mostly red, elytral lateral and anterior margins and suture black. Elytral margin slightly wider black on its central part. Head, ventrites and legs black. Antennae black.

Pronotum elliptical, 2.3 times wider than long, with maximum width in the middle. Sides regularly rounded. Anterior margin feebly notched in the middle. Disk flat, with a faint median wrinkle, bordered from explanate margins by winding indistinct sulci, fairly impressed on their posterior half. Surface of disk matt, with very sparse and feeble punctures and some whitish scattered very short hair. Explanate margins fairly impressed, matt, with slightly coarser punctures than on disk and few sparse very short hair above all along sides.



5, 6. *Cyrtonota timida* n. sp.: 5 – dorsal, 6 - lateral

Scutellum triangular, impunctate. Base of elytra much wider than pronotum, humeri slightly protruding anterad, humeral angles rounded. Elytral surface slightly lustrous, with very sparse short hair above all along sides and apex. Postscutellar area very feebly impressed, postscutellar tubercle very large, dorsal profile back to tubercle almost straight up to elytral margin. Punctures of disk irregularly arranged, large and coarsely impressed. Punctures on red part of explanate margin almost as coarse and dense than those of disk, fairly smaller and less impressed on black part of explanate margin.

Head, legs and ventrites with no diagnostic characters. Length ratio of antennal segments: 100:55:108:110:100:85:78:75:83:90:143.

Female genitalia (fig. 1): vasculum of spermatheca hook-shaped, slightly wider towards base. Ampulla bubble-shaped at base, fairly tapering in a tubular process on its distal part. Ductus spermathecae thin, very long, not coiled. Ductus of auxiliary gland simple, not sclerotized, connected in the middle of bubble-shaped base of ampulla. Bursa copulatrix membranous, with no diagnostic characters.

Types

Holotype: "Colombia, 2800m, env. Chargayaco, VII.1975". "D. Sassi des. 2008, HOLOTYPE". (specimen preserved in the author's personal collection).

Discussion

Once again the observation of female genitalia in Cassidinae species has shown interesting features that could be of some use in diagnostic and phylogenetic comparisons, unlike male genitalia that seem to be very uniform even among quite distant species. In the tribe of Stolaini the spermatheca has been accurately described and figured for the genus *Chelymorpha* Chevrolat, 1837 (Rodriguez 1994a, Borowiec & Skuza 2004), for two species of genus *Omaspides* Chevrolat, 1837 (Rodriguez 1994b) and recently for some species of genera *Acromis* Chevrolat, 1837; *Agenysa* Spaeth, 1905; *Echoma* Chevrolat, 1837; *Eugenysa* Chevrolat, 1837; *Omaspides* Chevrolat, 1837 and *Paraselenis* Spaeth, 1913 (Borowiec & Opalinska 2007). The latter paper in particular gives a detailed comparison between and within genera, with some taxonomic changes putatively suggested on the basis of the spermathecal shape.

A swift comparison with some other species of the tribe (figs. 2-4) confirms the potential taxonomic significance in the morphology of female genitalia. The position of ductus of auxiliary gland and the length of ductus spermathecae could be useful diagnostic traits within genus *Cyrtonota*. The shape of ampulla and ductus spermathecae promises to supply phylogenetic informations for detecting relationships between the genera of Stolaini.

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REFERENCES

Borowiec, L., 1989. Two new species of *Cyrtonota* Chevrolat (Coleoptera, Chrysomelidae, Cassidinae). Elytron, **3**: 25-30.

—, 1998. Review of the Cassidinae of Ecuador, with a description of thirteen new species (Coleoptera: Chrysomelidae). Genus, Wrocław, **9**: 155-246.

—, 1999. A world catalogue of the Cassidinae (Coleoptera: Chrysomelidae). Biologica Silesiae, Wroclaw, 476 pp.

—, 2000. *Cyrtonota montana*, a new species from Ecuador. (Coleoptera: Chrysomelidae: Cassidinae). Genus, Wrocław, **11**: 49-52.

—, 2002. New records of Neotropical Cassidinae, with description of three new species. (Coleoptera: Chrysomelidae). Genus, Wrocław, **13**: 43-138.

—, 2007. A new species of *Cyrtonota* (Chevrolat, 1837) from Peru and note on *Cyrtonota balyi* (Kirsch, 1883). (Coleoptera: Chrysomelidae: Cassidinae: Stolaini). Genus, Wrocław, **11**: 49-52.

Borowiec, L., Opalińska, S., 2007. The structure of the spermathecae of selected genera of Stolaini and Eugenysini (Coleoptera: Chrysomelidae: Cassidinae) and its taxonomic significance. Ann. Zool., Warszawa, **57**: 463-479.

Borowiec, L., Sassi, D., 1999. Four new species of *Cyrtonota* Chevrolat (Coleoptera: Chrysomelidae: Cassidinae). Genus, Wrocław, **10**: 89-101.

Borowiec, L., Skuza, M., 2004. The structure of spermatheca in the genus *Chelymorpha* Chevrolat, 1837 (Coleoptera: Chrysomelidae: Cassidinae) and its taxonomic significance. Ann. Zool., Warszawa, **54**: 439-451.

Chevrolat, A., 1837. In: Dejean, M., Catalogue des Coléopteres de la collection de M. le Comte Dejean, 2nd édition. Paris, livr. 5, 361-442 pp.

Kirsch, T., 1883. Neue südamerykanische Kafer. Berl. Entomol. Zeitschr., **27**: 187-213.

Rodriguez, V., 1994a. Function of the spermathecal muscle in *Chelymorpha alternans* Boheman (Coleoptera: Chrysomelidae: Cassidinae). Physiological Entomology, **19**: 198-202.

—, 1994b. Sexual behaviour in *Omaspides convexicollis* Spaeth and *O. bistriata* Boheman (Coleoptera: Chrysomelidae: Cassidinae), with notes on maternal care of eggs and young. Coleopterists Bulletin, **48**: 140-144.

Sekerka, L., 2007. Description of *Cyrtonota caprishensis* n. sp. from Peru together with a redescription of *C. lurida* (Spaeth, 1913) (Coleoptera*:* Chrysomelidae*:* Cassidinae*:* Mesomphaliini). Genus, Wrocław, **18**: 671-676.

Spaeth, F., 1901. Beschreibung neuer Cassididen nebst synonymischen Bemerkungen. IV. Verh. Zool.-Bot. Ges. Wien, **51**: 333-350.

—, 1902. Neue Cassiden aus Peru. Deutsch. Entomol. Zeitschr., **1902**: 81-102.

—, 1905. Beschreibung neuer Cassididen nebst synonymischen Bemerkungen. V. Verh. Zool.-Bot. Ges. Wien, **55**: 79-118.

—, 1907. Beschreibung neuer Cassididen nebst synonymischen Bemerkungen. VI. Verh. Zool.-Bot. Ges. Wien, **57**: 137-166.

—, 1909. Beschreibung neuer Cassididen nebst synonymischen Bemerkungen. VII. Verh. Zool.-Bot. Ges. Wien, **59**: 364-397.

—, 1913. Kritische Studien über den Umfang und die Begrenzung mehrerer Cassiden-Gattungen nebst Beschreibung neuer amerikan. Arten. Archiv F. Naturges., **79**: 126-164.

—, 1928. Mitteilungen ueber die Cassidinen des Nationalmuseum in Prag. II. (Col., Chrysomelidae). Sbornik Entomol. Nar. Mus. Praze, **6**, 50: 29-47.